

# A NEW SPECIES OF THE GENUS GALERUCA MÜLLER FROM CHINA (COLEOPTERA, CHRYSOMELIDAE, GALERUCINAE)

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**Abstract** *Galeruca (Galeruca) regularis* sp. nov., from Sichuan Province, China, is described and illustrated. The type specimens are deposited in Insect Collection of the Institute of Zoology, Chinese Academy of Sciences and Ron Beenen Collection, The Netherlands.

**Key words** Coleoptera, Chrysomelidae, Galerucinae, *Galeruca*, new species.

## 1 Introduction

Among a series of unidentified specimens of the chrysomelid genus *Galeruca* from the Insect Collection of the Institute of Zoology, Chinese Academy of Sciences, we discovered a yet unknown species, described herein. The specimens have been collected on Gongga Mountain (Sichuan). This mountain is situated in the area around Western Sichuan, Eastern Xizang and Northern Yunnan, which shows a high diversity of animals and plants and is rich in endemic species. Wilson (1992) refers to this area as the Eastern Himalayan biodiversity “hot spot”.

The genus *Galeruca* is currently being revised (Beenen, 1999, 2002, 2003, 2005). During that revision some species new to science have been described of which one is from China (*Galeruca parallelepennis* Beenen, 2002 from Qinghai).

The following abbreviations will be used: IZCAS-Insect Collection of the Institute of Zoology, Chinese Academy of Sciences, Beijing, China; RBCN-Ron Beenen Collection, Nieuwegein, The Netherlands.

*Galeruca (Galeruca) regularis* sp. nov. (Figs. 1–3)

Holotype ♂. Length: 7.60 mm (total); 7.50 mm (from the anterior border of the eyes to the tip of the elytra). Greatest width across both elytra: 4.65 mm. Winged. General colour brown; elytra with yellow margins (Fig. 1). Oblong; elytra flattened and broad, without costae, covering the abdomen completely.

Head. Maximal width of head across the eyes: 1.76 mm. Vertex roughly punctate; diameter of punctures larger than spaces between. Vertex black with two large red-brown spots situated at both sides of a fine and regular median longitudinal line. Frontal tubercles well defined with large punctures. Antennae strong. Segments 1 to 6 shiny; segment 7 completely pubescent; apical part dorsally produced; segment 8 and 9 with dorsal part dull due to pubescence, ventral part shining; segment 1

almost completely dull, only a small line on ventral part shining; segment 11 completely dull due to pubescence. Labrum black with 3 punctures with large bristles; two more large bristles are situated at both sides of the labrum. Maxillary palpus with apical segment elongated.

Pronotum. Maximal width 3.25 mm (in middle); length in the middle 1.55 mm. Front border almost straight; corners produced. Front angles slightly depressed; lateral borders evenly rounded; lateral rim shallow (Fig. 3). Base of pronotum uneven; two lateral depressions deeper than the two depressions along the middle (one before the front border and one before the apical border). The lateral parts of the pronotal base also depressed. Punctures strong, evenly spread. Hairs on pronotum as long as the diameter of the punctures they stand in. Pronotum black at sides, red-brown in the middle; dull.

Scutellum. Triangular; brown with margins yellow. Shallowly punctate.

Elytra. Flattened expansion of elytral margin narrow and shallow. Elytra evenly punctate. Lines were in other species costae 1, 2 and 4 are situated indicated only by a more intense colour. Punctures large, but definitely smaller than in *Galeruca (Galeruca) daurica* (Joannis) and a bit larger (but equally regular) than in *Galeruca (Galerotoma) haagi* (Joannis).

Aedeagus (Fig. 2) narrow. In dorsal view top is pointed.

Paratype ♀. Length: 9.45 mm (total); 8.35 mm (from the anterior border of the eyes to the tip of the elytra). Greatest width across both elytra: 5.20 mm. Winged.

The paratype is very similar to the holotype except for the dimensions and sex. A genital groove is absent, the tarsi of the front legs are narrow and the antennae lack the shining parts. The pronotum is more dark. The elytral colour is red brown with margins yellow.

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Revisional notes on *Galeruca* 5.

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## 2 Materials

Holotype ♂ (IZCAS), Gongga Mountain, Sichuan, IZAS, Sep. 1982, alt. 4 650 m., Leg. ? / TYPUS / Holotype *Galerua regularis*, Beenen & Yang det 06". Paratype ♀ (RBCN), Gongga Mountain, Sichuan IZAS, Sep. 1982, alt. 4 650 m., Leg. ? / PARATYPUS/Paratype *G. regularis*, Beenen & Yang det 06".

## 3 Diagnosis

This species belongs to the species in the subgenus *Galerua* that possess a weak depression near the anterior angle of the pronotum. Among these species it is the only one without costae. It is supposed to be very near to *Galerua sinensis* Laboissière, that has elytra unicolorous redbrown and possesses weak costae. It proved to be

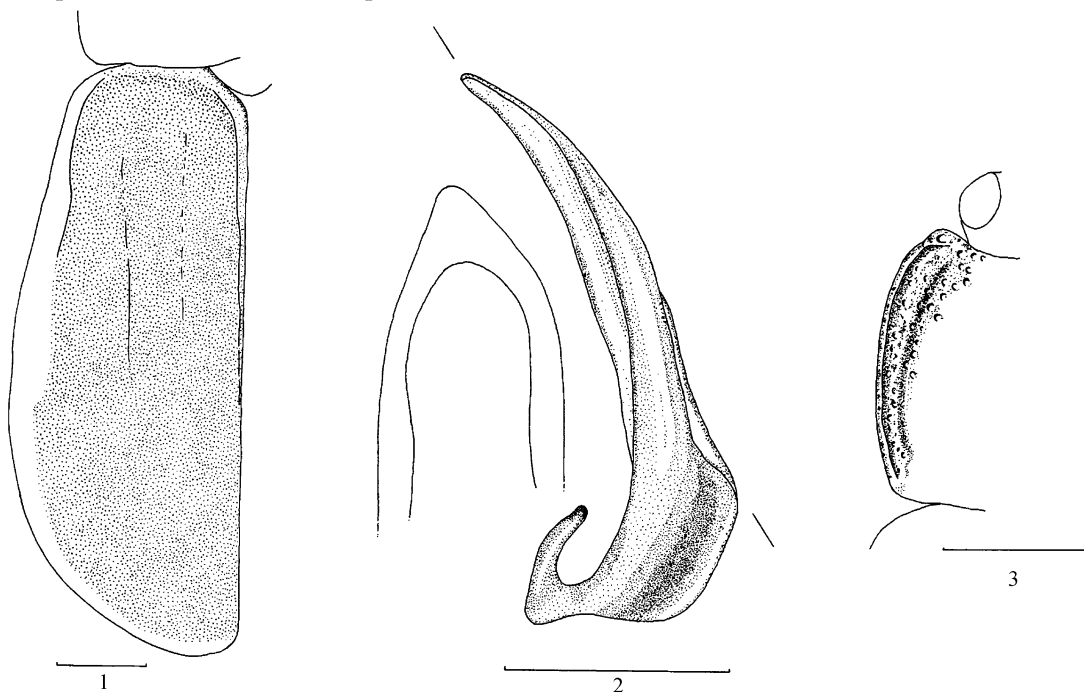
impossible to study the types of *Galerua sinensis*.

The description of *Galerua sinensis* is based on specimens collected between Tatsienlou and Kiu lung (Laboissière, 1937). Tatsienlou is a locality now named Kangding. Kangding is located 30 km northeast from the top of Gongga Mountain. Kiu Lung is now named Jiulong and is located about 100 km southwest from the top of Gonggashan.

## 4 Condition of the Specimens

Both specimens are pinned. The holotype shows no missing parts. The aedeagus is glued to a card on the same needle as the beetle. The female paratype misses tarsal segments 2 and following of the right metatarsus.

Etymology. The species is named after the characteristic evenness of the punctuation of the elytra.



Figs. 1-3. *Galerua regularis* sp. nov. 1. Left elytron of the female paratype. 2. Aedeagus. 3. Left half of the pronotum of the female paratype, showing the lateral rim. Scale bars= 0.5 mm.

## 5 Discussion

In China the genus *Galerua* is represented by at least 35 species. Of these, according to Yang & Yu (1994) 19 are described, and 16 have not been described yet. Recently Beenen (2002) described *G. parallipomis*, a Chinese species not among the undescribed species listed by Yang & Yu (1994). So the number of *Galerua* species in China is at least 36. In the area around Western Sichuan, Eastern Xizang and Northern Yunnan (eastern edge of the Tibetan plateau) 18 of the 35 Chinese species have been recorded, of which the majority is supposed to be endemic (Yang & Yu, 1994). The eastern edge of the Tibetan plateau is not only very rich in *Galerua* species. Wilson (1992) states that 39% of the 9 000 plant species

occurring in the "lower slopes of the Himalayas" (Eastern Himalayas hot spot area) are limited to this region. It is very likely that also in other groups of organisms high numbers of endemics can be found in this area.

*Galerua regularis* sp. nov. is one of the species identified by Yang & Yu (1994) as a separate undescribed species. So, at least 15 Chinese *Galerua* species are in need of description.

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萤叶甲属一新种 (鞘翅目, 叶甲科, 萤叶甲亚科)

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摘 要 记述采自我国四川贡嘎山的萤叶甲属 1 新种: 匀刻萤叶甲 *Galeruca regularis* sp. nov.。模式标本中正模保存在中国科学院动物研究所标本馆, 副模由荷兰 Ron Beenen 博士个人收藏。

关键词 鞘翅目, 叶甲科, 萤叶甲亚科, 萤叶甲属, 新种.

中图分类号 Q969. 48